



*Hanford Site Integration Project*

# Approach to Science and Technology through Roadmapping

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U.S. Department of Energy

# Topics



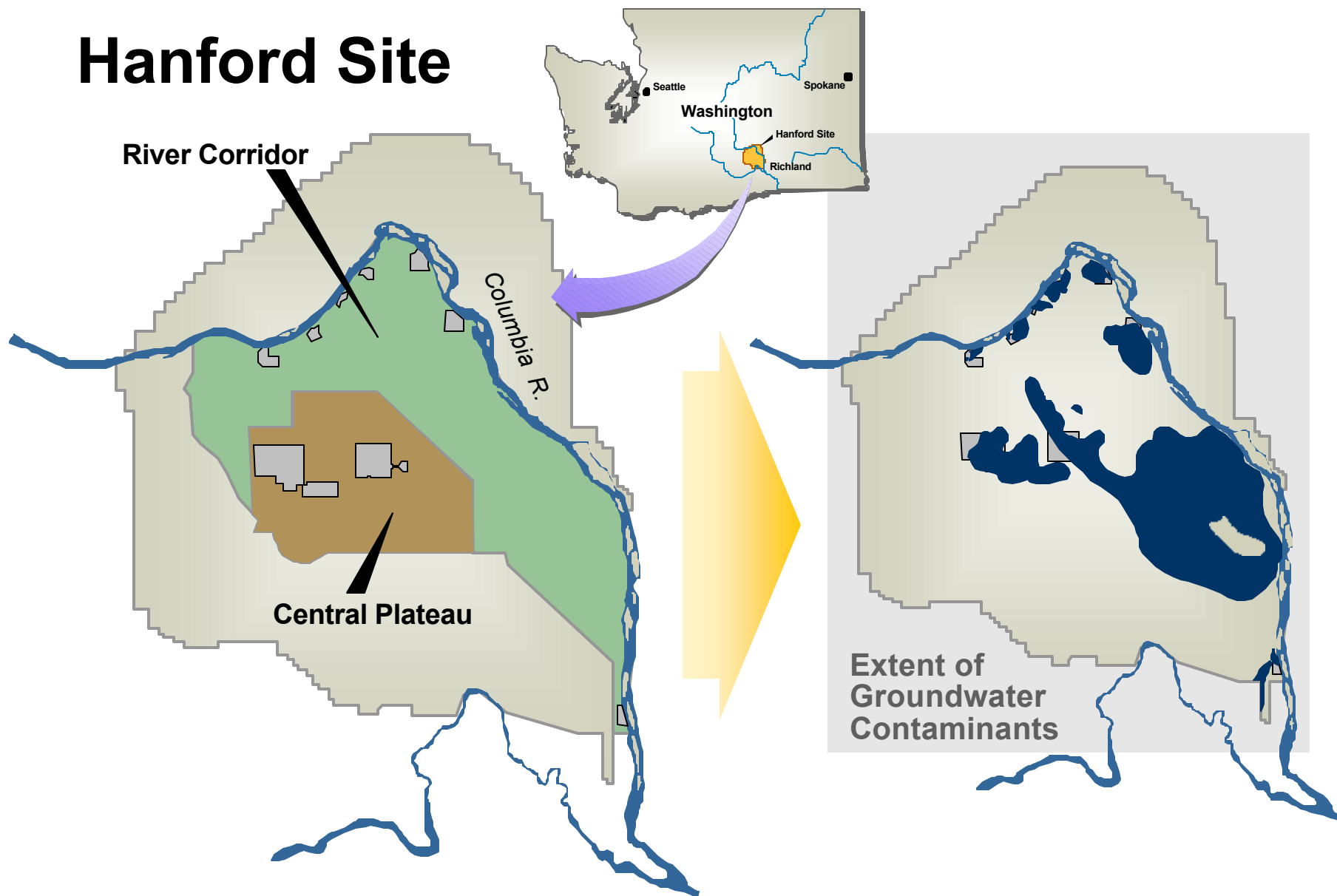
**Science & Technology (S&T)  
Roadmap Development and  
Implementation**

**Benefits of the S&T Roadmap  
Process**

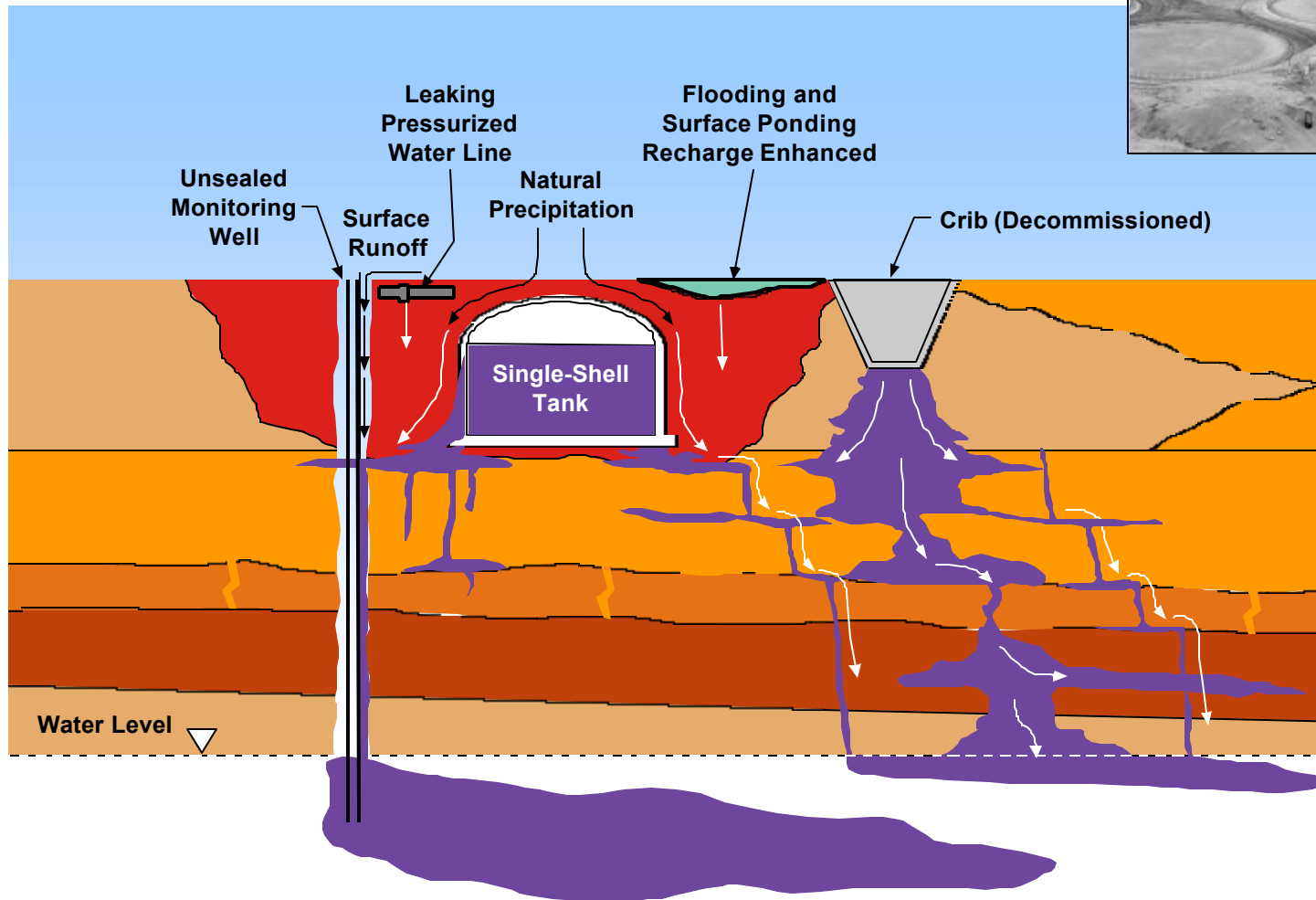
**Early S&T Roadmap Successes**

**Lessons Learned**

# Hanford Site



# Tank Waste Problems: A Driver for the Integration Project



# Integration Project Approach

- **Site Wide Integration of Information**
- **System Assessment Capability**
- **Science & Technology**
- **Public Involvement**
- **Technical Review**

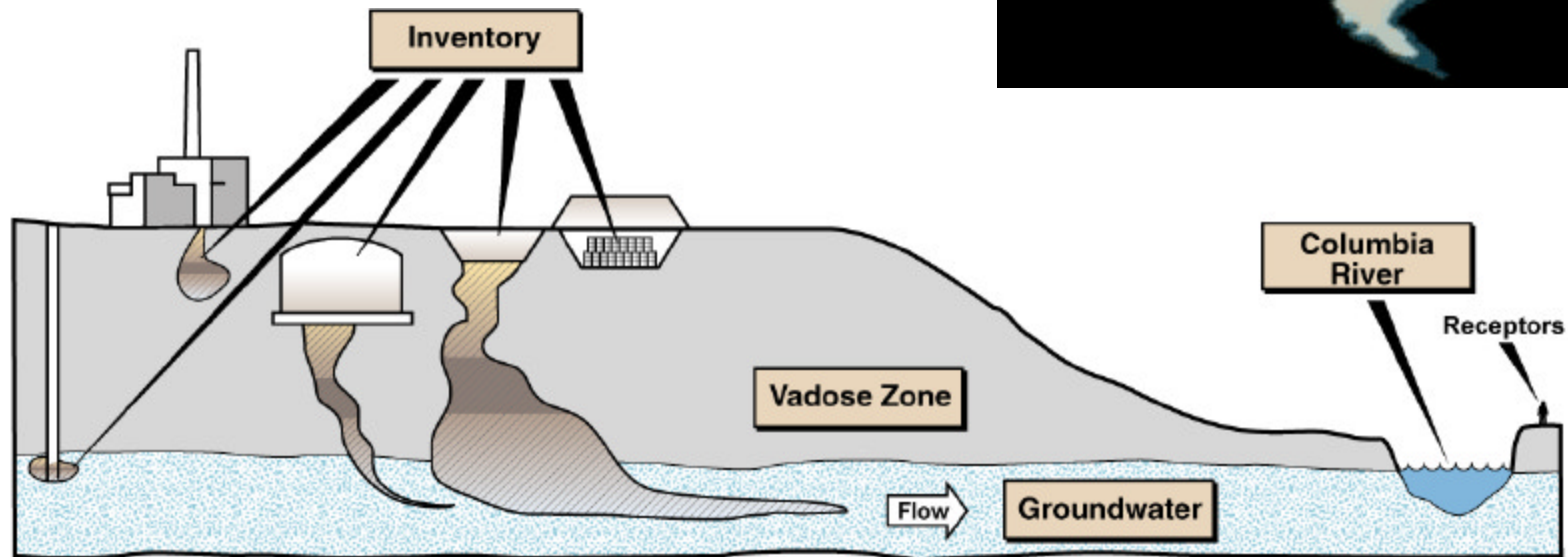


***Inform and Influence  
Cleanup Decisions***



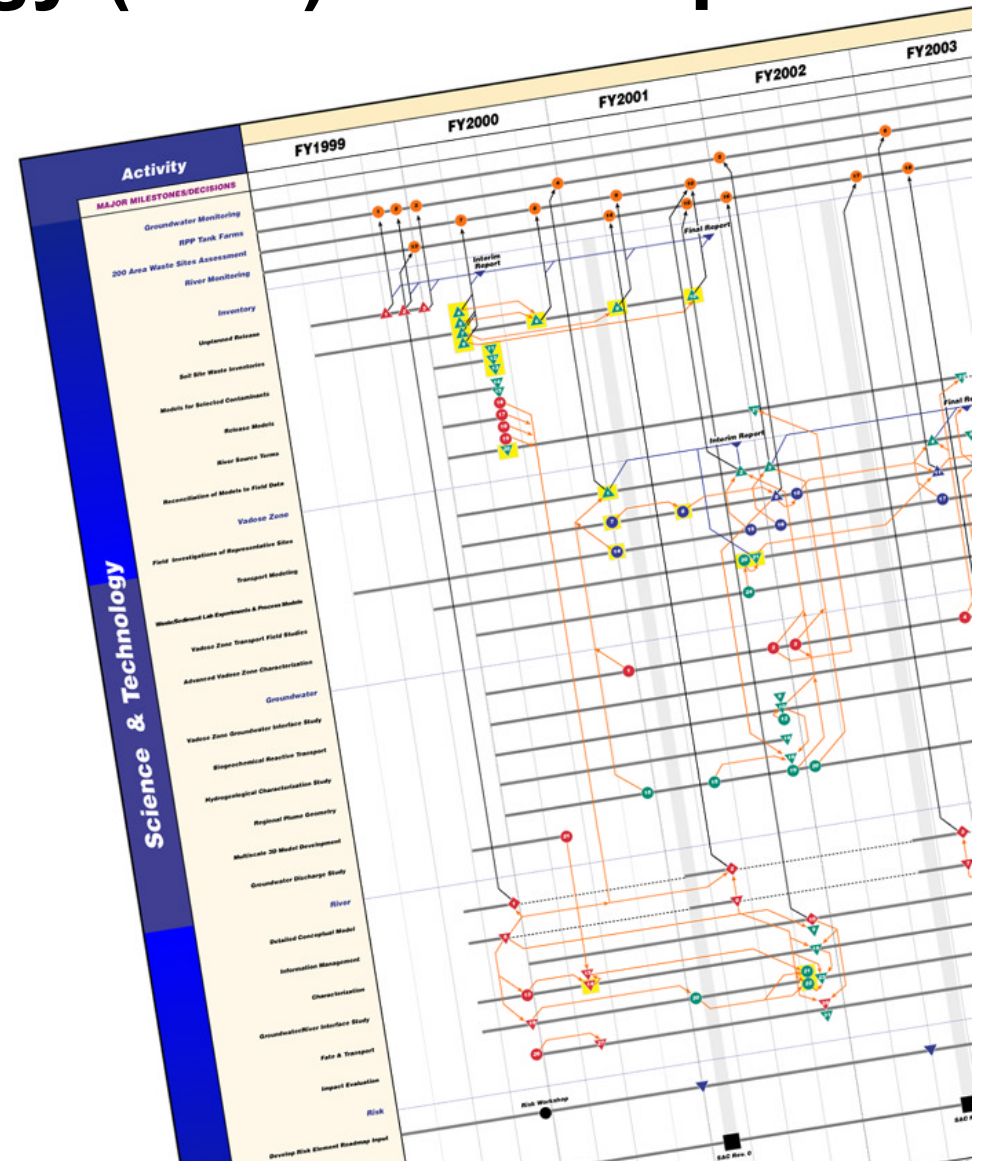
# System Assessment Capability

**Develop a systems model and data for comprehensive, site-wide impact assessments of Hanford contaminants**

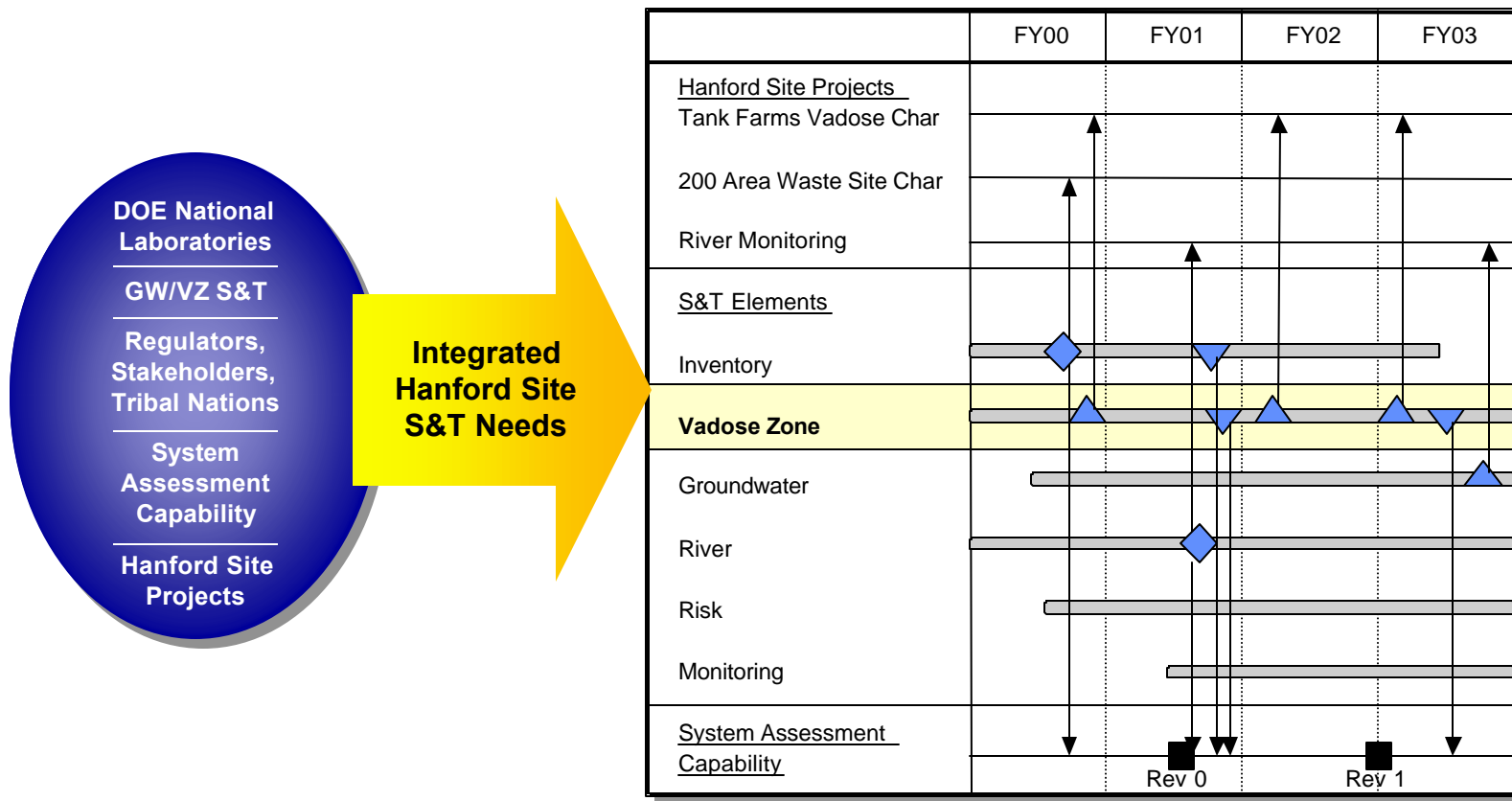


# Science & Technology (S&T) Roadmap

- Organized by technical element:
  - Inventory
  - Vadose zone
  - Groundwater
  - River
  - Risk
- Fills critical gaps in Hanford's technical baseline
- Managed as part of the Integration Project



# Science & Technology (S&T) Roadmap



## Benefits of S&T Roadmap



- Improves organization/communication of S&T needs and strategies
- Provides input for annual budget planning
- Enhances collaboration between the project and scientific community
- Identifies overlaps and gaps in S&T
- Identifies uses on similar projects at other DOE sites

## Early Successes of S&T Roadmap

- **Used S&T roadmap as the basis for the FY99 EMSP call for research proposals**
- **Demonstrated value of Hanford's S&T activities resulting in project funding**
- **Linked advanced characterization and modeling efforts to support compliance-driven investigations at Hanford's tank farms**
- **Developed methodology for estimating contaminant inventories at waste disposal sites**

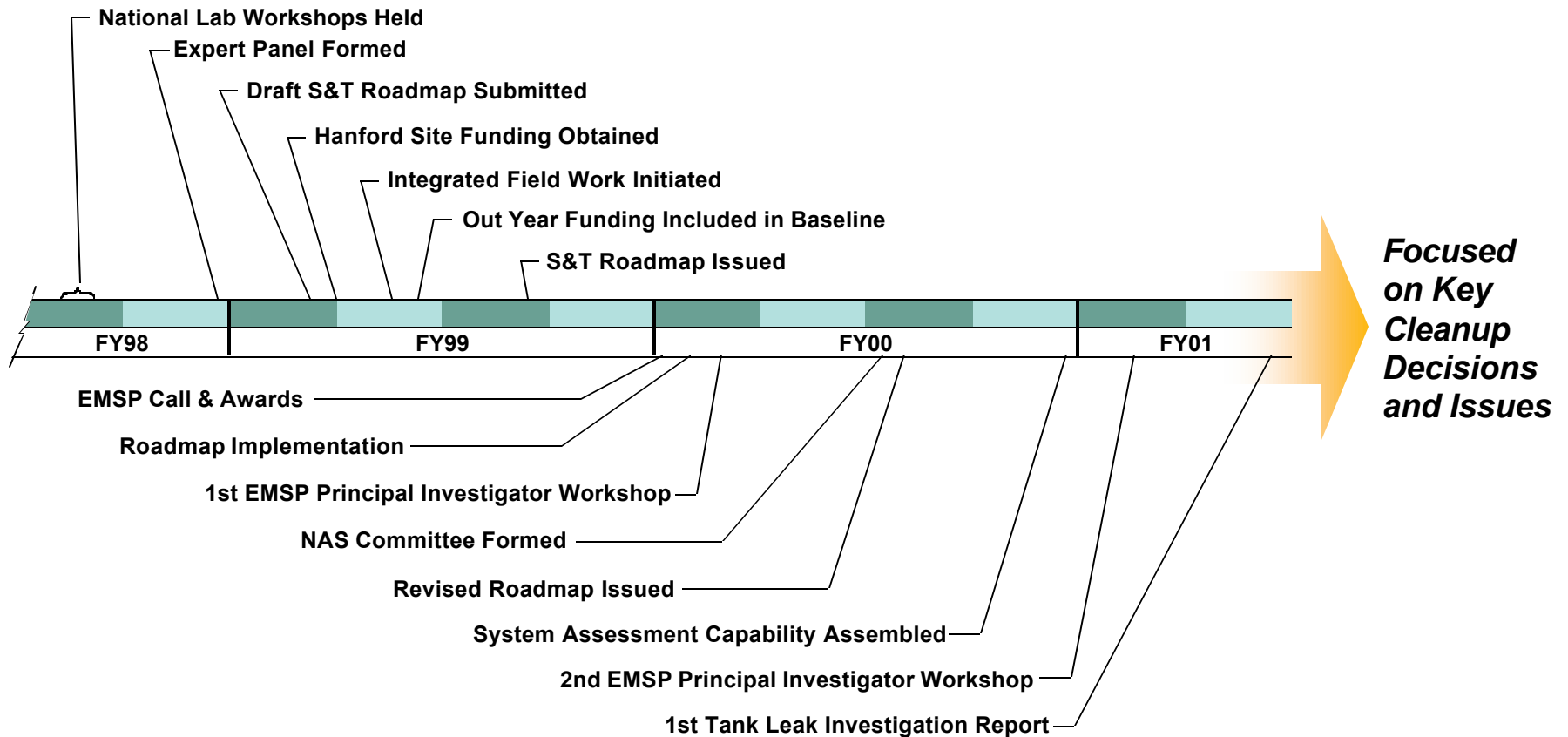


# Challenges of the S&T Roadmap



- Gaining problem holder appreciation of S&T value
- Gaining problem solver appreciation of the constraints of compliance-driven projects
- Identifying the critical cleanup decisions and issues and their timeframe
- Maintaining continuity in S&T funding with compliance pressures at the site

# Integration Project History



# Conclusions

- Science & Technology is an integral part of Hanford's Integration Project
- Roadmap is a tool for defining and managing Science & Technology
- The process is important – the product is essential

